

*Data of specimens figured:*

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|------------------------------------|-------------------------------------|
| a: Gwelin Range, E. Sepik, 700 ft. | h: Toricelli Range, 2,000 ft.       |
| b: no data, German N.G.            | j: Prince Alexander Range 1,500 ft. |
| c: Finisterre Mts., low altitude   | j: Prince Alexander Range 1,500 ft. |
| d: Finisterre Mts., low altitude   |                                     |
| e: no data, German N.G.            |                                     |
| f: no data, German N.G.            | k: Snow Mts.                        |
| g: Stephansort                     |                                     |

Fig. 3. Female hindwing-pattern and shape, simplified. a and b are typical *paradisea paradisea*, the figure a representing Pagenstecher's = Staudinger's typus, figure c representing *paradisea borschi* type specimen

Fig. 4. Geographical distribution and altitudes of *O. (S.) paradisea*. The small insert map (top right) indicates previous recorded occurrences. The arrows on the main map indicate probable distribution of the forms: a dotted line indicates probable former or present clines. Notice that the arrows do not indicate the direction of the spreading of the ancestral forms, see map, fig. 1. Notice also geographical overlap of subspecies 1 and 2

## New Records of Lepidoptera in Malformed Inflorescence of Mango in the Punjab

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Mango malformation, both floral and vegetative is a complex and serious malady throughout India. Affected inflorescence due to atypical growth, turns into a thick fluffy black mass. Many insects hide in such heads but very little information is available on insects breeding inside the diseased inflorescence. It is however important to have data on the role of such sources in harbouring different pests.

During 1971-72, three lepidopterous insects were reared from malformed flowers. A small brownish moth *Pyroderces* sp. (*Cosmopterygidae*) was most abundant constituting 80 per cent of emerged moths followed by a grey yellowish moth, *Hypsipygia mauritialis* Boisd. (Pyralidae) while *Dichocrocis punctiferalis* Gn. (Pyralidae) with deep brilliant yellow wings having conspicuous black dots constituted 5-7 per cent of the moth population. *Dichocrocis punctiferalis* Gn. was reported by Fletcher (1914) infesting mango flowers, outside Southern India (probably he referred to malformed flowers). The others have not been reported so far. So malformed heads acted as unwanted reservoirs of pest breeding. Removal of malformed inflorescence of mango is a standard recommendation for minimising the disease. Present information further emphasises their removal and proper disposal as well, because *Pyroderces* sp. and *D. punctiferalis* are pests of other crops also.

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### REFERENCE

- Fletcher, T. B. (1914). *Some South Indian insects and other animals of economic importance*. Supdt. Govt. Press, Madras, p. 433.